

## Product datasheet for **SC119659**

### **GUCY1B1 (NM\_000857) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GUCY1B1 (NM_000857) Human Untagged Clone
Tag:	Tag Free
Symbol:	GUCY1B1
Synonyms:	GC-S-beta-1; GC-SB3; GUC1B3; GUCB3; GUCSB3; GUCY1B3
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC119659 sequence for NM\_000857 edited (data generated by NextGen Sequencing)

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ATGTACGGATTTGTGAATCACGCCCTGGAGTTGCTGGTGATCCGCAATTACGGCCCCGAG
GTGTGGGAAGACATCAAAAAAGAGGCACAGTTAGATGAAGAAGGACAGTTTCTTGTGAGA
ATAATATATGATGACTCCAAAACCTTATGATTTGGTTGCTGCTGCAAGCAAAGTCTCAAT
CTCAATGCTGGAGAAATCCTCAAATGTTTGGGAAGATGTTTTCGTCTTTTGCCAAGAA
TCTGGTTATGATACAATCTTGCCTGCTGGGCTCTAATGTCAGAGAATTTCTACAGAAC
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AGGTGCACTGATGCAGAAAAGGGCAAAGGACTCATTTTGCCTACTACTCAGAGAGAGAA
GGACTTCAGGATATTGTCATTGGAATCATAAAACAGTGGCACAACAAATCCATGGCACT
GAAATAGACATGAAGTTATTGACGAAAGAAATGAAGAATGTGATCATACTCAATTTTTTA
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TGTCTTTTGGGAATACTGTCAACCTCACAGCCGAACAGAAACCACAGGAGAAAAGGGA
AAAATAAATGTGTCTGAATATACATACAGATGTCTTATGTCTCCAGAAAATTCAGATCCA
CAATTCACCTTGAGCACAGAGGCCAGTGTCCATGAAGGGCAAAAAGAACCAATGCAA
GTTTGGTTTCTATCCAGAAAAATACAGGAACAGAGGAAACAAAGCAGGATGATGACTGA
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Clone variation with respect to NM\_000857.2

<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_000857 unedited</p> <pre>GCGGTCAAATTTGTATACGACTCACTATAGGCGGCCGCGNAATTCGCACGAGGGCCGCTG CCGCTCTGCCTGGTCCCTTCGGCCGTACCTCTGCGTGGGGGCTGCCTCCCCGGCTCCC GGTGCAGACACCATGTACGGATTTGTGAATCACGCCCTGGAGTTGCTGGTGATCCGCAAT TACGGCCCCGAGGTGTGGGAAGACATCAAAAAAGAGGCACAGTTAGATGAAGAAGGACAG TTTCTTGTGAGAATAATATATGATGACTCCAAAACCTTATGATTTGGTTGCTGCTGCAAGC AAAGCTCAATCTCAATGCTGGAGAAATCCTCCAAATGTTTGGGAAGATGTTTTTCGTC TTTTGCCAAGAATCTGGTTATGATACAATCTTGGGTGCTCTGGGCTCTAATGTCAGAGAA TTTCTACAGAACCTTGATGCTCTGCACGACCACCTTGCTACCATCTACCCAGGAATGCGT GCACCTTCCTTTAGGTGCACTGATGCAGAAAAGGGCAAAGGACTCATTTCGACTACTAC TCANGAGAGAGAGGACTTCAGGATATTGTCATTGGAATCATCAAAACAGTGGCACAACAA ATCCATGGCACTGAAATAGACATGAAGTTATTTCAGCANAGAAATGAAAGATGTGATCAT ACTCAATTTTTAAATTGAGAAAAGAGTCAAAGAGAGGATTTTATGAAGATCTTGACAGA TTTGAAGAAATGGTACCCAGGAATCACGCATCAGCCCATATACATTCTGCNAAAGCTTTN NCCTTTCATATATATTTGACCGGNACCTAGTGGTCACTCAGTGTGGCAATGCTATATAC AAAGTTCTCCCCAGCTCCAGCCTGGGGATTGCANGCTTCTGGCTGGCTTCTCGCTGGGTC GNCCTCATATTGAATTAGGTTCCAGGGATCCTTTTT</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_000857 unedited</p> <pre>AGCTATGGACCGCGCCGCAATCTAGNAGTCGGTTTTTTTTTTTTTTTTTTTTTTTTTTTGA AAAAAATTTATTACAGACTCTTTTACACATTAACATGGAACATTATACATATATCGAT GTGCTGATATGAAATACTAAATTTAAAGGCAAACATTTTACACAAAAGTAGTTGCACTC TATTTTATAAAGATAGATATTAATAAGTTATCAGAGACATTTAAGAGCTAGAGGCCAATT ATTCCAACAGTAATGCATTCTATGCTGAAAGTAAACTAAGTTTTCTGAACATGATGTCCT GGATATAATCACATTCCTTAAGCTAAGGAAAGGGAGCTCATTCTGGGAATACAAGGCC AAGAAGGGCTCTAACAGCAGTATCCCAGCAGTGTGTTCCAGATTTATTCTTGGATGTGG TTGGAGCTCCCAACATTTAGCCTGAACTAATGTAACAGCTCAATGTGAAACAATGCAGCT TTCTGTAAACAGCTGCCTGTGGTTAATGAGATTTAATACAGGGGATACAGTTACAAATGAT AGCATTTTAGAAGAATTATAATTGCCATATGATTTGAATTAGTAATCAAATACTTTAATA ACAGAAAACGTGTATTCTATATTTCTGAAAGGGAAGTAGCATACTTCAAAATAGTCACTAT TTTCTTAGCATGATATGTTAATTCTTACTTTGGGAGTCTGAAAATAATTGCATTTTTTCC CCTAAAACCTTAGAATTCCTCCTTTAGAAATGATTTCTATAATGATATACACCAACATGA TATAAACTTTATTACATTATAGNCATTAATAATACATATACATATATGTGGGAACACTA ACAGATTNGGNTAACATGNATATAATATACACATGGGNCCAACACTGGTNCAGNTNCATT TAACTAAAATCACAAATATTTATTGGGTGCCTACTACTTGCAGACACCAGGTTAGGAG</pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_000857
<b>Insert Size:</b>	2930 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_000857.1</a> , <a href="#">NP_000848.1</a>
<b>RefSeq Size:</b>	2443 bp
<b>RefSeq ORF:</b>	1860 bp
<b>Locus ID:</b>	2983
<b>UniProt ID:</b>	<a href="#">Q02153</a>
<b>Cytogenetics:</b>	4q32.1
<b>Domains:</b>	CYCc
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Gap junction, Long-term depression, Purine metabolism, Vascular smooth muscle contraction
<b>Gene Summary:</b>	<p>This gene encodes the beta subunit of the soluble guanylate cyclase (sGC), which catalyzes the conversion of GTP (guanosine triphosphate) to cGMP (cyclic guanosine monophosphate). The encoded protein contains an HNOX domain, which serves as a receptor for ligands such as nitric oxide, oxygen and nitrovasodilator drugs. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. It encodes isoform 2, which lacks an internal segment and is shorter than isoform 1.</p>